

Title (en)
MARINE BATTERY SAFETY SYSTEM AND METHOD

Title (de)
MEERESBATTERIESICHERHEITSSYSTEM UND -VERFAHREN

Title (fr)
SYSTÈME ET PROCÉDÉ DE SÉCURITÉ DE BATTERIE MARINE

Publication
EP 4320677 A1 20240214 (EN)

Application
EP 22785563 A 20220408

Priority
• US 202163172895 P 20210409
• US 2022024097 W 20220408

Abstract (en)
[origin: US2022328893A1] A marine battery pack including an enclosure defining a cavity, a plurality of cell modules within the cavity, each comprising a plurality of battery cells, and at least one sensor configured to sense at least one of a temperature, a pressure, a presence of water, and a gas content within the cavity. A controller is configured to detect an event warranting decommission of the battery pack based on the temperature, the pressure, the presence of water, and/or the gas content within the cavity, and then to automatically operate a pump to intake water from outside of the enclosure and pump water through the cavity from an inlet port in the enclosure to an outlet port in the enclosure so as to cool the plurality of battery cells.

IPC 8 full level
H01M 10/625 (2014.01); **B63H 21/17** (2006.01); **H01M 10/42** (2006.01); **H01M 10/48** (2006.01); **H01M 10/613** (2014.01); **H01M 10/637** (2014.01); **H01M 10/6568** (2014.01); **H01M 50/249** (2021.01); **H01M 50/253** (2021.01)

CPC (source: EP US)
B60L 3/0046 (2013.01 - EP US); **B60L 3/04** (2013.01 - EP US); **B60L 50/64** (2019.01 - EP US); **B60L 58/26** (2019.01 - EP); **B63B 79/10** (2020.01 - US); **B63B 79/40** (2020.01 - US); **B63H 21/17** (2013.01 - EP); **H01M 10/48** (2013.01 - EP); **H01M 10/482** (2013.01 - US); **H01M 10/486** (2013.01 - EP US); **H01M 10/488** (2013.01 - US); **H01M 10/613** (2015.04 - EP); **H01M 10/62** (2015.04 - EP); **H01M 10/625** (2015.04 - US); **H01M 10/63** (2015.04 - US); **H01M 10/654** (2015.04 - EP); **H01M 10/6567** (2015.04 - EP US); **H01M 50/24** (2021.01 - US); **H01M 50/249** (2021.01 - EP); **H01M 50/574** (2021.01 - US); **H01M 50/609** (2021.01 - EP); **H01M 50/636** (2021.01 - US); **B60L 2200/32** (2013.01 - EP US); **B60L 2240/36** (2013.01 - EP); **B60L 2240/545** (2013.01 - EP US); **B60L 2240/662** (2013.01 - EP); **B60L 2250/10** (2013.01 - EP); **H01M 10/0525** (2013.01 - US); **H01M 2200/00** (2013.01 - US); **H01M 2220/20** (2013.01 - EP US)

Citation (search report)
See references of WO 2022217106A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
US 2022328893 A1 20221013; EP 4320671 A1 20240214; EP 4320677 A1 20240214; US 2022328943 A1 20221013; WO 2022217106 A1 20221013; WO 2022217108 A1 20221013

DOCDB simple family (application)
US 202217716745 A 20220408; EP 22785563 A 20220408; EP 22785565 A 20220408; US 2022024097 W 20220408; US 2022024099 W 20220408; US 202217716732 A 20220408